A method of correlating a sampled direct sequence spread spectrum signal with a locally provided replica signal containing a spreading code is disclosed together with a corresponding signal processor, receiver, computer-readable storage medium and computer program for the same. The method comprises the steps of combining the bit or bits of at least two signal samples of the received signal to form a first word; providing a second word containing bits corresponding to the replica signal; and executing one or more software based instructions to process the first and second words, especially in hardwired circuitry, in order to obtain a correlation value.